CLAIMS:

1. A method of processing a gesture signal comprising one or more segments, each segments comprising one or more samples, the method comprising the step of filtering one or more segments by applying an infinite impulse response filter both in a forward and in a backward temporal direction, so as to produce a band-limited gesture signal.

2. The method according to claim 1, wherein the infinite impulse response filter applied in the forward temporal direction has forward initial conditions and the infinite impulse response filter applied in the backward temporal direction has backward initial conditions, the method further comprising the step of matching the forward and backward initial conditions.

3. The method according to claim 1, further comprising the preliminary steps of:
- interpolating the sampled signal, and
- resampling the interpolated signal at a relatively high frequency,

so as to produce a gesture signal having a well-defined sampling rate which can then be appropriately filtered.

4. The method according to claim 3, wherein the step of interpolating the sampled signal involves a linear interpolation.

5. The method according to claim 1, further comprising the step of downsampling the filtered signal.

6. The method according to claim 1, further comprising the step of compressing the signal.

7. The method according to claim 6, wherein the step of compressing the signal involves differentiating and/or entropy encoding.

8. The method according claim 3, further comprising the step of recognizing handwriting on the basis of the interpolated, resampled and filtered signal.

9. A software program for carrying out the method according claim 1.

10. A data carrier comprising the software program according to claim 9.

11. A device for processing gesture signals, the device containing the software program according to claim 10.

12. A device for processing a gesture signal comprising one or more segments, each segments comprising one or more samples, the device comprising means for filtering one or more segments by applying an infinite impulse response filter both in a forward and in a backward temporal direction, so as to produce a band-limited gesture signal.

13. The device according to claim 12, wherein an infinite impulse response filter applied in a forward temporal direction has forward initial conditions and an infinite impulse response filter applied in a backward temporal direction has backward initial conditions, the device further comprising means for matching the forward and backward initial conditions.

14. The device according to claim 12, further comprising means for:

- interpolating the sampled signal, and
- resampling the interpolated signal at a relatively high frequency, prior to the filtering so as to produce a gesture signal having a well-defined sampling rate which can then be appropriately filtered.

15. The device according to claim 14, wherein the means for interpolating the sampled signal are arranged for a linear interpolation.

16. The device according to any of the claims 12 further comprising means for downsampling the filtered signal.

17. The device according to any of the claims 12 further comprising means for compressing the signal.

18. The device according to claim 17, wherein the means for compressing the signal are arranged for differentiating and/or entropy encoding.

19. The device according to any of the claims 13, further comprising means for recognizing handwriting on the basis of the interpolated, resampled and filtered signal.

20. A handwriting recognition system, comprising an input device (21) for inputting handwriting signals and a recognition device (23) for recognizing handwriting signals, the system further comprising a processing device (22) according to any of claims 11-19.